What is claimed is:

1. A head-mounted optical visualization system for a user, the system comprising:

an image source for generating a virtual image;

an optical deflecting device including an optical end element;

said optical deflecting device being optically connected to said image source for receiving said virtual image and for deflecting said virtual image to said optical end element whereby said virtual image is provided in the viewing field of said user in front of the eyes of said user;

a frame mountable on the head of said user for carrying said optical deflecting system; and,

an adjusting device attached to said frame for variably changing the position of said optical end element substantially in a plane parallel to said viewing field of said user.

2. The head-mounted optical visualization system of claim 1, said adjusting device including:

a horizontal or a vertical guide rail mounted on said frame;

a slide supported on said guide rail so as to be movable therealong; and,

said optical end element being movably mounted on said slide.

3. The head-mounted optical visualization system of claim 1, wherein said adjusting device is configured for continuously or discontinuously changing the position of the optical end element.

4. The head-mounted optical visualization system of claim 1, wherein said optical deflecting device is adjustable with a view to a desired magnitude of said virtual image provided ahead of the eye of said user by said optical deflecting device.

5. The head-mounted optical visualization system of claim 1, wherein said optical end element is configured as a prism.

6. The head-mounted optical visualization system of claim 5, wherein the size of the prism can be selected.

7. The head-mounted optical visualization system of claim 6, wherein the surfaces of the prism are at least partially curved.

8. The head-mounted optical visualization system of claim 1, wherein said optical deflecting device includes an optical deflecting element for deflecting said virtual image to said optical end element.

9. The head-mounted optical visualization system of claim 8, wherein the optical deflecting element is configured as a prism.

10. The head-mounted optical visualization system of claim 9, wherein the surfaces of the prism are at least partially curved.

11. The head-mounted optical visualization system of claim 1, wherein said optical deflecting device includes an optical lens system which is adjustable for changing the virtual viewing depth in which said user recognizes a virtual object shown by the virtual image.

12. The head-mounted optical visualization system of claim 11, further comprising a tracking system for controlling the adjustment of said optical lens system in response to the virtual viewing direction and the real viewing depth of said user.

13. The head-mounted optical visualization system of claim 1, wherein said optical deflecting device is built into a closed housing at least outside of the viewing field of said user.

14. The head-mounted optical visualization system of claim 1, wherein said optical deflecting device is releasably or tiltably attached to the frame.

15. The head-mounted optical visualization system of claim 1, wherein said image source is a first image source for generating a first virtual image; said optical deflecting device is a first optical deflecting device and said optical end element is a first optical end element; said system further comprising a second image source for generating a second virtual image; a second optical deflecting device having a second optical end element for deflecting said second virtual image to said second optical end element; and, said first and second optical end elements being mounted ahead of corresponding ones of the eyes of said user.

16. The head-mounted optical visualization system of claim 15, wherein said first image source is identical to said second image source.

17. The head-mounted optical visualization system of claim 15,

wherein said frame is configured as a spectacles frame having spectacle lenses suitable for the user.

18. The head-mounted optical visualization system of claim 17, wherein said first and second optical end elements are mounted ahead of corresponding ones of said spectacle lenses as seen from said user.

19. The head-mounted optical visualization system of claim 1, wherein said optical end element is attachable to a spectacle lens.